CORRIGENDA

IN VOL. XLV.

Page 52, *line* 20, *for* X *read* I
    74,   7, *for* Wm. *read* T. M.
    90,   8, *for* *l* *read* *j*
    93,   24, *for* squares *read* layers
    94,   1, *for* also, *read* , also
    96.   The following is a more correct description of Commander
                   Hood's Ice-Saw : —

The action of the machine may be thus explained, premising that Fig. 1 is a side view, Fig. 2 a bird's-eye view, and Fig. 3 an end view. Suppose the lever *c c* to have been just moved from the horizontal position shewn by the dotted lines ; in doing this it has elevated the end *k′* of the propeller, and has drawn its lower end along the ice : but although the lower end of the propeller may be advanced by the motion of the lever, it will not recede, because the angle which it makes with the horizon, and the relative positions of the centres of motion, cause the pointed claws at its lower end to enter the surface of the ice ; the consequence is, that the lower end becomes a fixed point, when the end *d* of the lever *c c* is again elevated. The upper end *k′* of the propeller must therefore advance, carrying with it the frame of the machine and the saw ; but the saw advances by an additional quantity equal to the versed sine of the angle described by the lever, the shorter arm being radius. The saw had, however, receded this quantity from its cut (as shewn by the dotted lines), when the end *d* of the lever *c c* was depressed ; it has, therefore, considerable motion, and the advantage of much momentum in the weight *h*, before the teeth come in contact with the ice. The propeller may be jointed to the lever by either of the three holes in its upper end—a change in which will evidently alter the rate of progression.

  Page 103, *line last, for* it *read* them
        105,   14, *for* vii, *read* vi.
        115,   5 *and* 6, *dele* at both ends, *and after* p p *insert* one at
                 each end : these pipes
        116,   4, *for* sufficient *read* an uninterrupted
        121,   8, *for* at *read* above
        124,   1, *after* round *insert* a comma, *and dele the* comma
                 after *c*,
       — *last line but one, after* lock *insert* ; *and after* 13 *dele* ;
        129,   5, *after* traverses *insert* *l*, the lever shewing how the
                 under side is bevelled off.
        131,   4, *after* neck *read* and cap
        137,   7, *for* vii. *read* vi.
        13,   *dele the words from* which *to* lanthorns, *and insert*—

The spindle *g*, which is connected with the crank *m*, does not revolve ; the bars *h h* have a revolving motion communicated to them by the pulley *j*, and revolve on the spindle *g* ; the bars *h h* communicate a revolving motion

to the bar *o o*, by means of the cranks *n n*, which causes the bar *o o* to re-
volve on its centre *m*: as the point *n* is at the same distance from the centre
m as the point *i* is from the centre *g*, and the line *m n* is parallel to the line
g i; *m n i g* form a parallelogram, and *n i* must always be parallel to *m g*; the
centre *m* is perpendicularly over the centre *g*, and *m* and *g* being fixed points,
the line *m g* must be perpendicular during the whole revolution of the bars;
therefore *n i*, the opposite side of the parallelogram, must also be perpendi-
cular; and as the lanterns are firmly fixed to the cranks *n i*, therefore
they also must remain perpendicular during the whole of their revolution.

Page 144, *line* 4 *from bottom*, *dele* or
146, 22, *for b read l*
153, 5 *from bottom, for* : heat *read* heat :
163, 5 *from bottom, for* whole *read* body